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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Gerhard Meixner

3825

3404

7590

01/27/2009

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EXAMINER

LOPEZ, MICHELLE

ART UNIT

PAPER NUMBER

3721

MAIL DATE

DELIVERY MODE

01/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,984	Applicant(s) MEIXNER ET AL.	
	Examiner Michelle Lopez	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9, 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is in response to the amendment filed on 11/14/08.
2. Claims 2 and 10 have been canceled.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the written description fails to make use of the term “Scotch Yoke” slider crank.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The written description, and the original claims, have been carefully reviewed by the examiner, and it is the opinion of the examiner that the claims present subject matter which fails to find support in the disclosure as originally presented. That is, claim 1 presents new matter which is not supported by the disclosure, as originally filled.

Claim 1 recites, a “Scotch Yoke” slider crank. There is no support for this subject matter in the written description, including the claims, as originally filed. A review of the originally filed disclosure does not provide support for the claimed subject matter presently found in claim 1. Accordingly, applicant is requires to either amend the claims to cancel the new matter or present clarification as how/where the subject matter of the present claim is found in the disclosure, as originally filed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-9, 11-12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stirm et al. (USPN 7331407) in view of Koehler (USPN 3650336). Stirm discloses an electric power tool having a drive unit (via motor shaft as best shown in figs. 3, 5-7, and 12) contained in a housing (fig. 1), an impact mechanism and a handle 6 (see fig. 1); a cam (e.g. 533, 633, 833, 1033, 1133, 1233, 1332); the impact mechanism has moving parts (i.e. a piston and a striker), wherein at least two of the moving parts are able to move inside a guide cylinder (e.g. 530,630,730,930) that is stationary in relation to the moving parts and a cam (e.g. 533, 633, 833).

With respect to claim 1, Stirm fails to disclose wherein the piston is connected to the drive unit by a scotch yoke slider crank provided to transmit the force between the cam and the drive element. Koehler shows a power tool comprising a drive unit (22), an impact mechanism having a piston (26) and a striker (30), a cam mechanism (203, 204) driven by the drive unit (212), wherein the wherein the piston is connected to the drive unit by a scotch yoke slider crank (196) provided to transmit the force between the cam and the drive element for the purpose of reducing the power tool length, providing a smaller number of components, reducing the power tool weight and manufacturing costs (as shown in col. 8, lines 45-75, col. 9, lines 1-3, and the

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embodiment of figs. 7-8). In view of Koehler, it would have been obvious to one having ordinary skill in the art to have provided Stirm's power tool with a Scotch yoke slider crank as taught by Koehler in order to reduce the power tool length, provide less components, reduce the power tool weight and manufacturing costs.

With respect to claims 3-4, Stirm discloses wherein the piston is embodied as a separated component (e.g. piston 220, 420, 520) and the drive element is embodied as a cranked rod (e.g. 531).

With respect to claims 5-6, Stirm discloses wherein the piston and the drive element are connected to each other by a pin (36 as best shown in figs. 1 and 10), and wherein a pin axis and a rotation axis of the drive unit are oriented in at an angle to each other.

With respect to claim 7, Stirm discloses wherein the piston and the drive element are embodied as integrally joined to each other (as best shown in the embodiment of fig. 8).

With respect to claim 8, Stirm fails to disclose wherein said drive element is made from plastic. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided said drive element comprised of plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice, and it would be for the benefits of providing a material with the desired rigidity and flexibility for properly transmitting an impact force. In re Leshin, 125 USPQ 416.

With respect to claim 9, Stirm discloses wherein the piston and the striker have the same diameter (as best shown in the embodiment of fig. 8).

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With respect to claim 11, Koehler shows wherein a pin (203) is able to move inside the slider crank, but fails to disclose wherein said pin is a ball. However, the embodiment of fig. 9, shows a drive pin having a ball shaped head (256) for the purposes of facilitating transmission of reciprocating motion to a piston. It would have been obvious to one having ordinary skill in the art to have provided Koehler's pin (203; as shown in the embodiment of figs. 8-9) with a ball shaped head in order to facilitate the transmission of reciprocating motion.

With respect to claim 12, the language "it is possible to adjust an angle" is functional and afforded light weight because it is predicated on a future act. Furthermore, the functional language is not supported by sufficient structure to perform the adjustment of said angle.

With respect to claim 14, Stirm's fig. 1 shows wherein the drive unit at the vicinity of (32) is situated centrally in relation to a longitudinal span of the handle 6.

With respect to claim 15, Stirm's fig. 1 shows wherein the impact mechanism is embodied as a pot-type piston and a pot-type striker (as shown in the embodiments of figs. 6-8).

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stirm et al. (USPN 7331407) in view of Koehler (USPN 3650336), as applied to claim 1 and 12 above, and further in view of Ousback (USPN 1901981). The modified invention of Stirm discloses an electric power tool having an impact mechanism with a piston and a drive element (crank rod) substantially as claimed, but fails to disclose wherein said drive element has a cranked section which allow adjustment of the angle between a longitudinal axis of the guide cylinder and the a rotation axis of the drive unit. Ousback shows an electric power tool comprising a drive unit (6) with a rotational axis, an impact mechanism having a guide cylinder (14) with a longitudinal axis

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and a piston (11) driven within said guide cylinder by a drive element (10, 9) as shown in fig. 1, wherein the drive element has a cranked section provided via the pivotal connection between (10) and (9) for adjusting the angle between the longitudinal axis of the guide cylinder and the rotation axis of the drive unit. It would have been obvious to one having ordinary skill in the art to have provided Stirm's drive element (crank rod) with a cranked section as taught by Ousback in order to change the angle between the rotational axis of the drive element and the longitudinal axis of the guide cylinder.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stirm et al. (USPN 7331407) in view of Koehler (USPN 3650336), as applied to claim 1 and 15 above, and further in view of Pyatov (USPN 4828046). The modified invention of Stirm discloses an electric power tool having a piston substantially as claimed, but fails to disclose wherein said piston is made from a light alloy. Pyatov teaches the concept of a percussion power tool having an impact piston made from a light alloy, i.e. aluminum, for the purpose of provide a piston made from a material which will properly transmit an impact force while enhancing its durability. It would have been obvious to one having ordinary skill in the art to have provided Stirm's piston made from an alloy as taught by Pyatov to provide durability of the piston.

Response to Arguments

8. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

9. For the reasons above, the grounds of rejection are deemed proper.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Lopez whose telephone number is 571-272-4464. The examiner can normally be reached on Monday - Thursday: 8:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle Lopez/
Examiner, Art Unit 3721

/Rinaldi I Rada/
Supervisory Patent Examiner, Art Unit 3721